

# Al Temperature Detection EFFICIENT | PRECISE | STABLE

# Fotric 226B

Auto Body Temperature Infrared Imager





### FOTRIC 226B

### Be the 1<sup>st</sup> to Built-In AI Intelligence

# EFFICIENT | PRECISE | STABLE

## **EFFICIENT**

Millisecond-Level Senseless Screening







#### **10 MINS TO DEPLOY**

10 minutes installation and commissioning in, power up ready to use

Built-in number statistics for automatic statistics of screened people and suspected alarms, to achieve data-based outbreak prevention and control

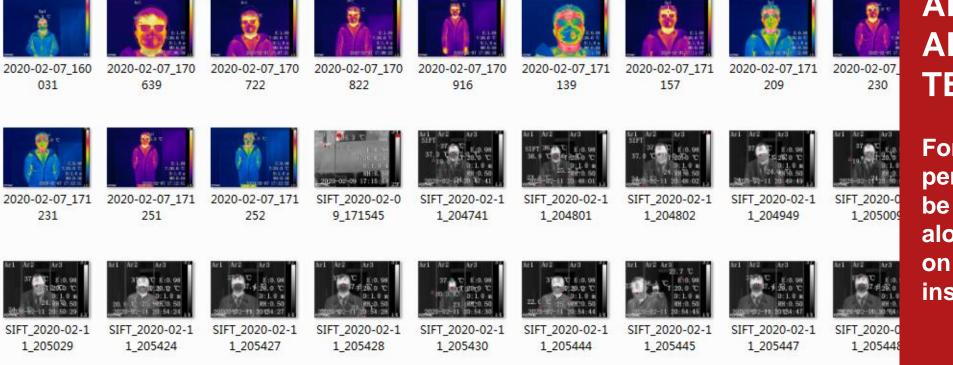


#### MILLISECOND RESPONSE WITH NON-CONTACT MEASUREMENT

Infrared thermal imaging technology provides non-contact measurement to ensure the safety of the detection personnel themselves.

Millisecond response does not affect population's traffic efficiency and behavior habits





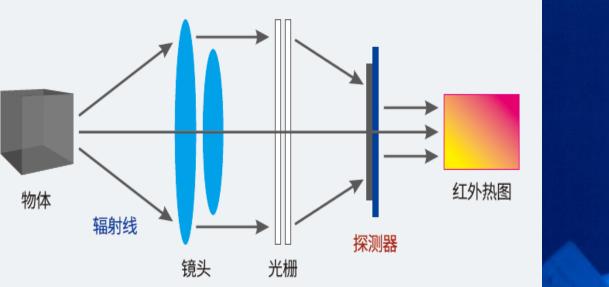
#### INSTANT VOICE ALARM FOR ABNORMAL BODY TEMPERATURE

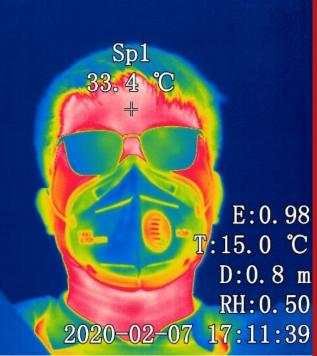
For abnormal temperature personnel, voice alarm will be triggered immediately, along with red box shown on the target face with an instant snap shot

### PRECISE

## 5 TIMES MORE OF EFFECTIVE TEMPERATURE PIXELS FOR MORE ACCURATE DETECTION



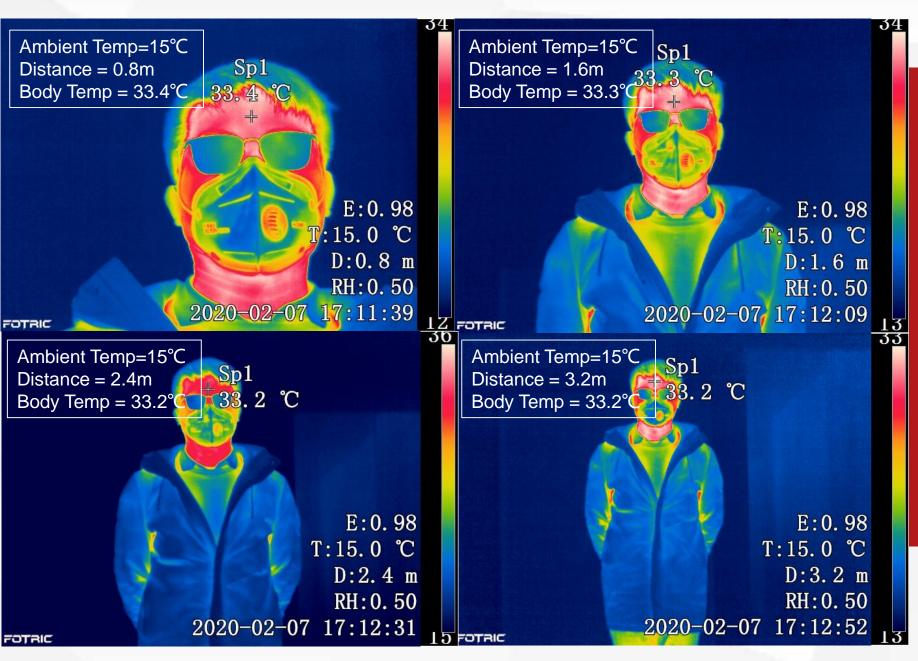




#### HIGH QUALITY IMAGE WITH ACCURATE TEMPERATURE MEASUREMENT

With Polysilicon-FPA, a single photo is up to 110k effective temperature measuring points, even human hair is cleared





BODY TEMPERATURE MEASUREMENT STABILITY OF ±0.5°C

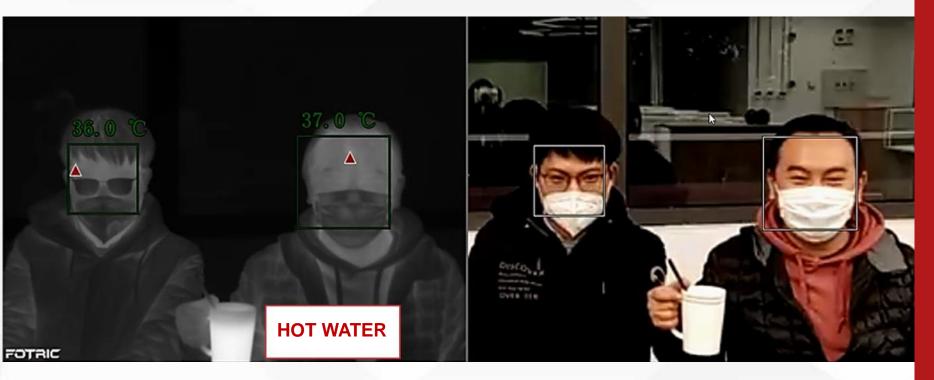
Support 7\*24 hours of continuous operation, temperature stability of ±0.5°C

Thermal Intelligence



## AUTOMATIC ADPATATION TO CHANGES IN AMBIENT TEMPERATURE TO PREVENT FALSE ALARM

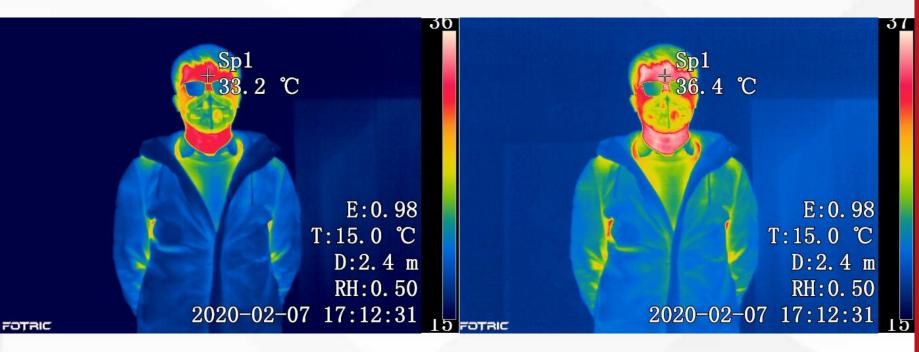




#### AUTOMATIC LOCK FACE FOR DETECTION TO PREVENT FALSE ALARM

Built-in AI dual-light face detection algorithm, only detect face temperature with 100% passing rate





Al Calibration Mode OFF

AI Calibration Mode ON

INTELLIGENT AI TEMPERATURE CALIBRATION ALGORITHM TO PREVENT MISREPORTING

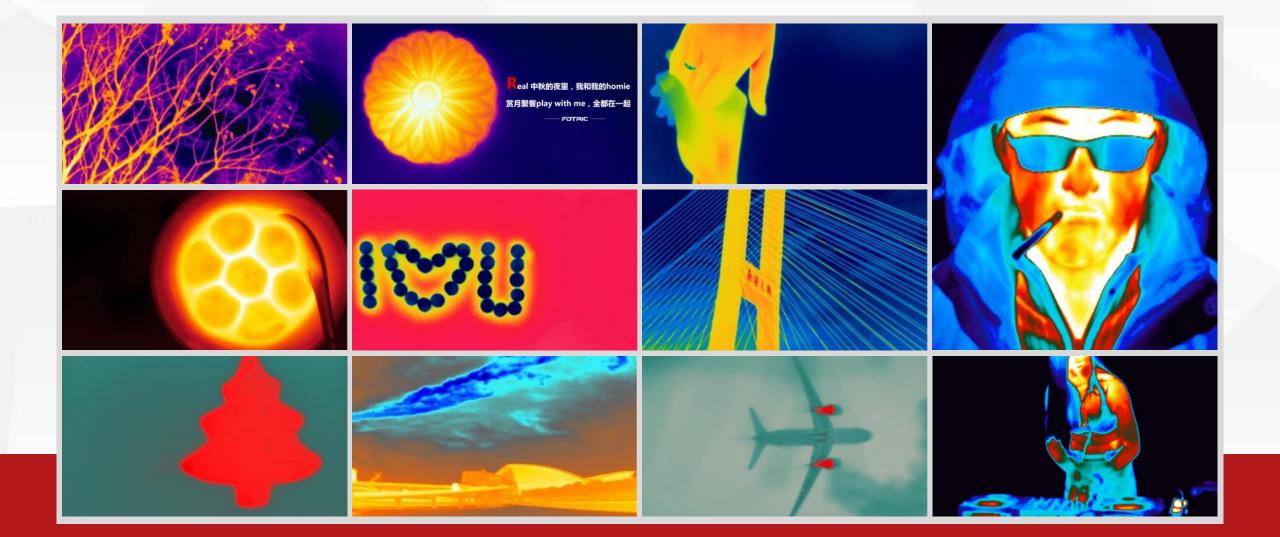
Built-in AI temperature calibration algorithm can automatic collect face temperature in different scenarios for self-learning to adapt ambient temperature changes real-time adjustment, i.e. body temperature varies during day and night

Thermal Intelligence

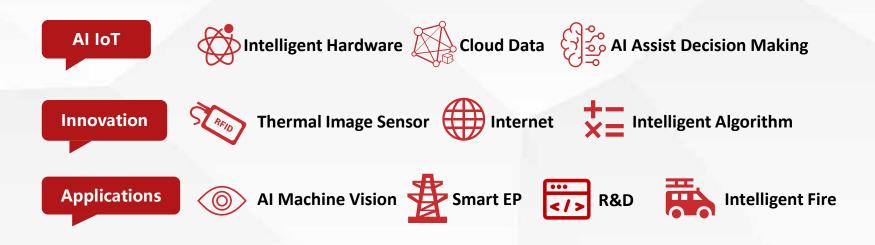
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## A LEADING BRAND OF INFRARED THERMAL TECHNOLOGY

# FOTRIC



#### **Worldwide Best Selling Infrared Thermal Imagers**



#### \* Distribution networks around Americans, Europe, APEA & SEA



#### **Infrared Thermal Technology Top Brand**

Contents lists avai Innlind Them CrystEngComm **Research** Pape Investigat PAPER phenomer B.A. Fu<sup>a,b</sup>, M \*Institute of Thermal <sup>b</sup> Beijing Key Laborati <sup>c</sup>Guohua Electric Pos () Check for upd Cite this: DOI: 10.1039/ HIGHLIGI . The microwave PEGylated . The effect of poy . The pumping ph simultane The temperatury . The microwave Liang Cheng Received 25th Novemb ARTICLE Zhuang Liu Accepted 31st January 2 Article history: \* Institute of Function Received 17 Februar Revised 7 June 2017 Accepted 8 June 201 Awailable online 11 DOI: 10.10.39/c7ce0203 Soochow University <sup>h</sup> Center for Molec rsc.li/crystenaco Reywords: ARTICLE Lignite sphere Microwave drying Temperature distrib Microwave energy d Introduction Article history: Received 22 August Accepted 1 Septemb Available online 16 Crystal polymorphi: Uniformity Pumping phenomen pharmacy, solid-sta science.1 For examp Keywords: Prussian blue nanoci Surface PEGylation nonlinear optical s bility can also be Cancer theranostics 1. Introduction imaging.2 However, Magnetic resonance China is the l β-glycine crystals u Photothermal therap which consume screening of a spec were applied in one of the hot resea ders into sphere In previous wor and raise the en moisture conter crystallized by addin value and the en and inorganic salt ing of devolatiliz obtained metastab the gas quality ( adding some divale 1. Introduction acids were added to the nucleation rate As a new type a-glycine. As a resi (PTT), which emi methods have two generate heat fro must be added to the cancer cells, has final constate will be the past decade, such as differen materials [3.4]. particles [6,7], dichalcogenides [9-11], as well

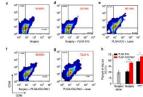
FOTRIC — Thermal Intelligence —

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COMMUNICATION	PEC	Bilayer Co	J	() Check fo	Microbe	*School of Phan *School of Basic	*Shenyang National Laboratory for M	for ef	Received 23 Apr 2016 : Accepted 12 Sep 2016 : Published 21 Car 2016 Photothermal therapy with immu	ne-adjuvant
Ĕ	The	Ying Hu,*  iaq			Hongyan Z	Department of	Louis II at a second class	Qian Chen <sup>1,</sup>	nanoparticles together with check	kpoint blockade
5		0 . 5 .	(1.山	Cite this: J. Mater 5, 4221	<sup>†</sup> College of Cl	Supporting	215123, China		for effective cancer immunothera	ру
2	CT/	Wei Chen,* an		3, 4221	Chemical Ima	ABSTRACT:	<sup>1</sup> Institute of Functional Nano and Se <sup>®</sup> School of Radiation Medicine and I		Qian Chen <sup>1,*</sup> , Ligeng Xu <sup>1,*</sup> , Chao Liang <sup>2</sup> , Chao Wong <sup>1</sup> , Rui Peng <sup>1</sup> & Zhuar	ng liw <sup>1</sup>
2			摘要		250014, Peopl	antimized the	Innovation Center of Radiation Med	A therapeutic		
1	Liang	Designing multistim	物,并料		<sup>‡</sup> College of Lif	emerged as a	Supporting Information	tumour relapse		
5	Xiaoy	and sophisticated bid	目测法		Supporti	develop bioc diagnosis. Ca	ABSTRACT: The integration of	therapy with c agent, and in	ICG-R837, while the DC maturation percentages from mice treated with PLGA-ICG or five R837 (with the same dose) only	PLGA-ICG-R837 nanoparticles designe effective immune-stimulator. It has be
·		highly demanded for	米复合			and intrinsic	radiation therapy (RT) in a single r	poly(lactic-co-	increased to ~30 or ~35%, respectively. Therefore, PLGA-ICG-	other ablative tumour treatments :
		the human's flick fin	关键词		ABSTRACI	nontoxic with cost-effective,	considerable potential for cancer designed PEGylated Au@Pt nanod	purely by three	R837 nanoparticles showed even stronger in vivo immune- stimulation effect compared with the same dose of free R837,	photodynamic therapy and crysublat tumour-specific immune responses <sup>43-46</sup>
	Two-din attentior	jumping robot mimic			magnetic mi cost detection	fabricate CD	as a novel X-ray computed tomog	^,III	although the two induced similar levels of in vitro DC maturation	c mineri
	properti	rolled carbon nanotu			capture and	structure. The photoabsorpti	theranostic agent for cancer therapy turned to the near-infrared region	1	(Fig. 1d and Supplementary Fig. 3). DCs upon maturation would secrete various types of cytokines to	
	ciated to	of rolled bilayer actua			simultaneou	toxicity tests	and thus enhances the efficacy of P atomic number (high Z) of Au as	1	regulate other types of immune cells <sup>38</sup> . Thus, in the following experiment, various cytokines including interleukin 6 (II6)	
	2D sp <sup>2</sup> . thermal	cally and sunlight-inc	(1.5)		effect of GC with a laser	applicability c	enhanced lethal effects of RT by	C	(an important marker in the activation of humoral immunity),	10" 10" 10" 10" 10" 10" 10" 10" 10" 10"
	been ex	ultralarge deformatio	(1.04	Received 8th Mar	variation and	that CDs/PBI KEYWORDS	dose within cancer cells. More imp ND-enhanced RT with PTT su	A COS	tumour necrosis factor a (TNF-a) (an important marker in the activation of cellular immunity), and interleukin 12 (IL-12p70) (an	1 9 of 1000
	seem na	>2 cm <sup>-1</sup> ), fast respon		Accepted 5th Mar	detection co	photothermal (	efficiently than that RT or PTT alor		important marker of innate immunity)39-42 in the mouse sera after	12" 12"
	ered in (TMDC:	jumping, the uniquel	Abstr:		successfully	1	imaging signal enhancement that ha CT and PTT/RT of cancer cells with		different treatment were analysed by ELISA. It was found that mice treated with PLGA-ICG-R837 showed high serum levels of IL-12p70,	
	of a her	smart soft robots wit	develo	DOI: 10.1039/c7t	116.5%.		and effective agents for cancer ther		IL-6 and TNF-11, which appeared to be higher than those in sera of	- 17 - 10 - 10 - 10
	two laye	light-induced tumble	nanoco	rsc.li/materials-b		1. INTRODUC	<b>KEYWORDS:</b> AugPt nanodendrit	3	mice treated with the same dose of free R837 (Supplementary Fig. 4). Such observed stronger in vivo immune-stimulation effect of PLGA-	(2086)
	The cor	type walking robots a	traditio		KEYWORD	Despite significative treatment, and	-		ICG-R807 than free R837 may be attributed to the sustained release of R837 from nanoparticles.	non-nm aser at the power density of 0.5 monitored by an infrared thermal ca
	ture wit Van der	ambient-sunlight-ind				mortality contin	1. INTRODUCTION			tumour temperature of mice injecte
	special (	the way for using one	optimi	1. Introd		and safer therap	Because of its specific lesion der		Photothermal tumour ablation for immune system activation. On the basis of the aforementioned experiment results,	
	recent y	various soft robots a	CFU/n	1. marou		During the pa	biosafety, near-infrared (NIR) lase therapy (PTT) has aroused great in field. <sup>1-5</sup> As a minimally invasive the cancer cells, PTT utilizes agents the			
	and ma		for det	Photothermal	In the past	emerged as a	field. <sup>125</sup> As a minimally invasive the		NATURE (DWWUNKCKTICH) (21999)(DOI: 103038/waame/3993) www.rulure.com/	Induncommunications
	ical or c		Key w	invasive and h	developed stea	Principally, the	cancer cells, PTT utilizes agents that which results in an increase in temp			
	applicati	1. Introduction		traditional che	portable, sensit	Construction of the Local State	types of nanomaterials have been (	BEI III III	Charge 6.1. Interfaced into a complete and interfaced approximation of the	NUT, INNERSTATING & PERFECTANCE CONTA
	ferent a			using PIT light	know, the limit	To most this on	appaed in FTT of cancers, functioning	as por utilization of highly	the inevitable exposure of normal tissues. High-energy radiation	
	batteries tion, <sup>[9]</sup> a	The development of :		(NIR) light into	cens by makeu	conversion abili	distant about from a second	amonte still common	would cause severe damage to surrounding normal tissues when	rofibers from solutions or melts
	new cla	strategies of natural (	21/1	temperature c					cancer cells are being killed.21 Moreover, numerous types of	s attracted extensive attention in spinning makes it possible to
	still at it	jumping, and flying conventional hard rol	沙门 一,由沙门	extensive atten 大国与1起时度初	and Harris <sup>9,10</sup>	remains one m	absorbents. <sup>7</sup> Recently, several studies h induced by nasti was USED for	of the natural tissue have demonstrated the 	Received: November 26, 2016 several advantages over their predecessors. <sup>41</sup> making by co ed to detect the CTCs after the incubation and	and aligned polymeric, ceramic, pomposite fibers, <sup>30</sup> which possess

自然》)是世界上历史最悠久、最有名望的科学杂志之 1869年11月4日。在许多科学研究领域中,很多最重 的研究结果都发表在Nature上。

DC maturation percentages from mice PLGA-ICG-R837 nanoparticles designed in our system is an effective immune-stimulator. It has been reported that many ~35%, respectively. Therefore, PLGA-ICG- other ablative tumour treatments such as hyperthermia photodynamic therapy and cryoublation will induce strong tumour-specific immune responses<sup>45-46</sup>. Therefore, we wonder it



out this later at the power density of 0.5 w cm monitored by an infrared thermal camera (Fotric 225), the tumour temperature of mice injected with PLGA-ICG or r ablation for immune system activation. PLGA-ICG-R837 under laser irradiation quickly rose to he aforementioned experiment results, ~60 °C, which was high enough to effectively ablate tumours

500+ Universities and Research Institutes globally have chosen FOTRIC for PAPER publication on top SCI journals

#### **Best-known Brand for Thermal Professors and Specialties**



United Infrared is in 9 San Antonio, Texas. October 18 at 5:45pm @ Fotric was a big hit at the Thermal Imaging Conference!



Fotric on Twitter 'Taken by a #Fotric 226 IR camera, roof scan demonstration Ben Hoson, Peter Hopkins in @unitedinfrared #infrared #thermalimaging conference!' TWITTER COM Review of FOTRIC 228 Pro Thermal Camera with 92-degree Lens for video recording of on-roof infrared moisture survey.

–by Greg Stockton Stockton Infrared Thermographic Services, Inc.

I recently bought a FOTRIC 228 Pro Thermal Camera. This IR microbolometer imaging system has 640 × 480 (307,200 pixels) detector resolution. It uses FOTRIC LinkIR smartphone app to operate and FOTRIC AnalyzIR as the image post-processing software. It came with the standard lens...but I also opted to get the 92-degree Lens (L92-228). This is a super wide-angle lens (FOV 92°x76°).

Our company was engaged to perform an on-roof IR moisture survey of an office and laboratory facility. I wanted to document every square inch of the entire roof area for trending purposes. The roof is a 12-year-old TPO membrane, over 2 inches of polyiso<u>cvanurate insulation</u>, over a



FOTRIC has won 1<sup>st</sup> Prize in the 2018 US IR/INFO Competition



#### **Highly Recognized Brand in Industry**



DISCIPLINE PRODUCT

#### FOTRIC X Thermal Camera

intelligent infrared thermal camera

#### **DESIGN** IRS SYST

IRS SYSTEMS INC. SHANGHAI, China

CLIENT / MANUFACTURER IRS SYSTEMS INC. SHANGHAI, China

#### Jury

Chris Alt Jan Andersson | Hokuto Ando | Stefan Behnisch | Inma Bernudez | Christoph Böninger | Emre Bozbeyli | Florian Breiter | Sander Brower | Dave Brown | Chi Mei Chang | Shikuan Chen | Faul Cohen | Gary Cooke | Alastair Curtis | Christian Doering | Micky Du | Fritz Frenkler | Bårbel Fritz | Nilas Galler | Oliver Gerstheimer | Anubhav Gupta | Sastoh Hanke | Sam Hecht | Henrik Holbaek | Bossana Hu | Ronald thrig | Manabu houe | Timothy Jacob Jensen | Henrik Ieppeten | Simone Kall: Evang Ton Kim | Sel Kim | Henk Kosch | Julia Landsied | Michael Lanz | Monika Lepel | Isabele Lidström | Petra Lundblad | Damian Mackiewicz | Birgit Mager | Alasdair McPhail | Michael Meyer | Nick Minal | Alexander Müller | Darragh Murphy | Achim Nagel | Thomas Paule | Larisa Pohl | Dick Powel | Ana Rehoa | Robert Sachon | Ayed San | Sonja Schiefer | Mario Schlegel | Susanne Schmidhuber | Gisela Schulzinger | Mario Schle; Sayuri Shoji | Birain Stephenes | Junggi Sung | Kyoko Tanaka | Martin Topel | Mirjam van Coille | Welfgang Wagner | Yao Yingjia | Birgite Ziemann

#### FOTRIC has won 2019 German iF Industry Design Award





FOTACE CONTRACT

■ A aussia.commander:



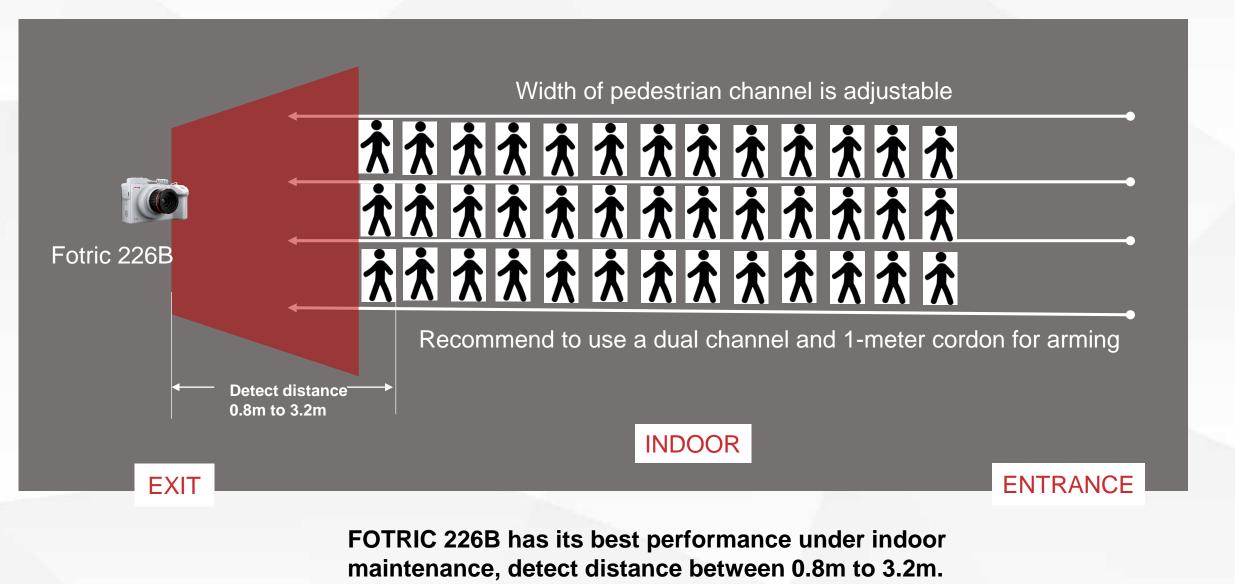
## FOTRIC 226B COST-EFFECTIVE, SAFE AND EASY TO MAINTAIN

#### MULTI APPLICATION SCENARIOS





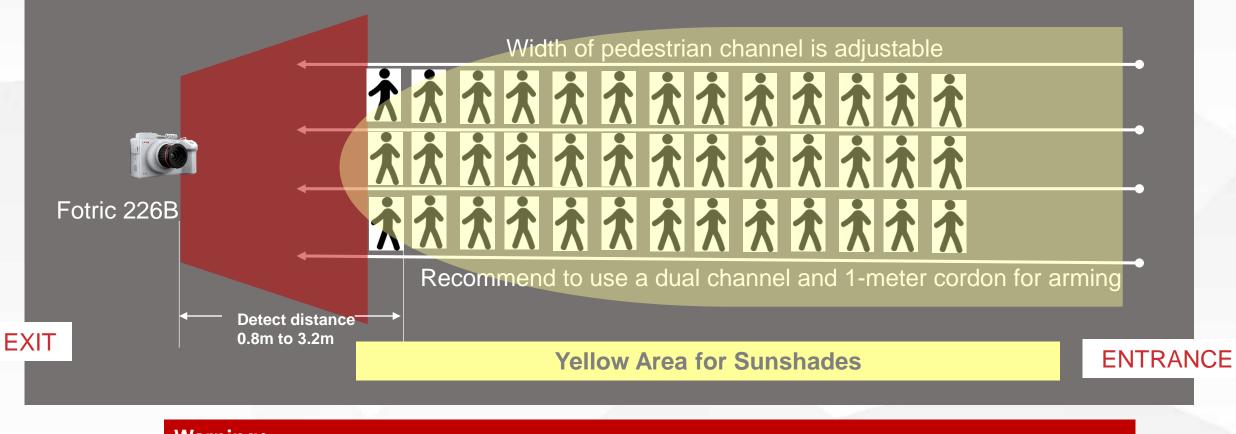
#### **Suggest Indoor Maintenance**



Thermal Intelligence

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#### **Outdoor Maintenance**



Warning:

When detect outdoor, sunshades are needed to installed to prevent ambient temperature interference

When rainy and windy, body temperature is lower than average

When under sunshine, hair will absorb heat to increase temp, avoid hair for false alarm

-Thermal Intelligence

#### Fotric 226B Main Specs

Model	FOTRIC 226B
IR Resolution	384 × 288 pixels
Thermal Sensitivity (NETD)	<0.05°C@30°C
Field of View (FOV)	28°H × 21°V
Detector Type	Polysillicon-FPA, uncooled microbolometer, 17 $\mu$ m, Spectral Range 8-14 $\mu$ m
Frame Rate	50Hz
Temperature Range	20°C-60°C (68°F-140°F)
Temperature Stability	±0.5°C
Alarm Function	Both color alarm and sound alarm
Image Format	Standard JPEG with temperature data
Software	FREE, WLIR Body Temperature Screening Software
Operating Temperature	0°C-40°C (32°F-104°F)
Storage Temperature	-20°C-50°C (-4°F-122°F)
Enclosure Rating	IP40



# **DELIVERY TIME**



# **Thermal Intelligence**

# AI INFRARED THERMAL DETECTION EFFICIENT | PRECISE | STABLE

FOTRIC INC. www.fotric.com